UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,330	10/09/2003	Yung Chang Liang	TRNDP009	9224

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EXAMINER
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2132	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/684,330	LIANG ET AL.
	Examiner	**Art Unit**	
	Laurel Lashley	2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 June 2007*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 June 2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☒ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   Applicant's amendments filed 06/14/07 with regard to claims 1-23 and the specification

have been accepted and entered. Claims 1 – 23 are still pending.

Drawings

2.   The drawings were received on 06/14/07. These drawings are acceptable.

Response to Arguments

3.   Applicant's arguments, see page 11, filed 04/16/07, with respect to claims 1 - 23 have

been fully considered and are persuasive. The rejection under 35 USC 102(b) as being

anticipated by Togawa et al. in US Patent No. 5918008 has been withdrawn. However, upon

further consideration, a new ground(s) of rejection is made in view of Hypponen et al. and Liang

et al.

Terminal Disclaimer

4.   The terminal disclaimer filed on 04/16/2007 disclaiming the terminal portion of any patent

granted on this application which would extend beyond the expiration date of the full statutory

term defined in 35 U.S.C. §154 to §156, and § 173 of any patent granted on Application No.

10/683,579, filed on October 9, 2007, has been reviewed and is NOT accepted.

> a.   The person who signed the terminal disclaimer is not recognized as an officer of
> the assignee, and he/she has not been established as being authorized to act on behalf
> of the assignee. See MPEP § 324.

An attorney or agent, not of record, is not authorized to sign a terminal disclaimer in the

capacity as an attorney or agent acting in a representative capacity as provided by 37 CFR 1.34

(a). See 37 CFR 1.321(b) and/or (c)..

It would be acceptable for a person, other than a recognized officer, to sign a terminal

disclaimer, provided the record for the application includes a statement that the person is

empowered to sign terminal disclaimers and/or act on behalf of the organization.

Accordingly, a new terminal disclaimer which includes the above empowerment

statement will be considered to be signed by an appropriate official of the assignee. A

separately filed paper referencing the previously filed terminal disclaimer and containing a

proper empowerment statement would also be acceptable.

It should be noted that applicant is not required to pay another disclaimer fee as set forth

in 37 CFR 1.20(d) when submitting a replacement or supplemental terminal disclaimer.

Accordingly the double patenting rejection has not been overcome and is therefore

maintained.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine
grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or
improper timewise extension of the "right to exclude" granted by a patent and to prevent
possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting
rejection is appropriate where the conflicting claims are not identical, but at least one examined
application claim is not patentably distinct from the reference claim(s) because the examined
application claim is either anticipated by, or would have been obvious over, the reference
claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re
Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225
USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re
Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163
USPQ 644 (CCPA 1969).
A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be
used to overcome an actual or provisional rejection based on a nonstatutory double patenting
ground provided the conflicting application or patent either is shown to be commonly owned with
this application, or claims an invention made as a result of activities undertaken within the scope
of a joint research agreement.
Effective January 1, 1994, a registered attorney or agent of record may sign a terminal
disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5.   Claims 1 –23 are provisionally rejected on the ground of nonstatutory obviousness-type

double patenting as being unpatentable over claims 1 -33 of copending Application No.

10683579 (hereinafter App. No '579). Although the conflicting claims are not identical, they are

not patentably distinct from each other because Applicants' virus sensor operates in the same

manner as the network virus/worm sensor in the copending Application. Considering claim 1 of

the instant Application, the "switch" operation is later identified in claim 2 to be a function of the

traffic controller whereas in copending App. No. '579 the limitation of the switching of modes as

facilitated by the traffic controller is present in claim 1 along with the other functions of the

network virus/worm sensor.

This is a provisional obviousness-type double patenting rejection because the conflicting

claims have not in fact been patented.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

6.   Claims 10 – 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant regards

as the invention.

7.   Claims 10 – 23 are rejected under 35 U.S.C. 112, second paragraph, as failing to set

forth the subject matter which applicant(s) regard as their invention. Evidence that claims 10 –

23, specifically independent claims 10 and 17 fail(s) to correspond in scope with that which

applicant(s) regard as the invention can be found in the reply filed 04/16/2007. In that paper,

applicant has stated that when the virus sensor is in the second mode or inline mode, "the data

packets determined *to be* infected or suspected of being infected are not returned to the

network", and this statement indicates that the invention is different from what is defined in

claims 10 and 17 because the claim language recites "data packets that are determined *not be*

infected or suspected of infection are not returned to the flow of data packets" (emphasis

added).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8.   Claims 17 – 23 are rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter. Claim 17 is non-statutory because it fails to recite a

storage medium which enables any underlying functionality to occur.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9.   Claims 1 – 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Hypponen et al. in US PGPub No. 2003/0191957 (US PGPub '957) further in view of Liang et al.

in US PGPub No. 2003/0208687 (hereinafter US PGPub '687).

10.   For claim 1, and similar claims 10 and 17, US PGPub '957 discloses:

In a distributed network of interconnected computing devices, a network virus monitor,

comprising *(see Abstract: method for detecting viruses in a computer network...)*:

a virus sensor operable arranged to detect a computer virus in the network such that the

bandwidth of the network is substantially unaffected when data packets are not removed from or

added to network traffic, but are copied *(see [0015]: no viruses identified...return transferred*

data...transit nodes...), and wherein when the virus sensor detects the computer virus, the data

packets are not copied and wherein a subset of data packets determined to be infected or suspected of being infected are not returned to the network *(see [0016] – [0018]: store infected data...disinfection unsuccessful...disregard..) but does not expressly discloses* the steps of detecting the computer viruses by switching between a number of modes (i.e. first or standby mode and second or inline mode), and wherein the virus monitor is able to collect network environment data and assign an IP address to itself, and wherein the virus monitor locates a controller in the network and registers itself with the controller, from where the virus monitor receives a rule set and an outbreak prevention policy (OPP).

Liang et al. however in US PGPub '687 however does disclose detecting the computer viruses by switching between a number of modes (i.e. first and second modes) (see [0034]: mode switching for virus software...), and wherein the virus monitor is able to collect network environment data and assign an IP address to itself, and wherein the virus monitor locates a controller in the network and registers itself with the controller, from where the virus monitor receives a rule set and an outbreak prevention policy (OPP) (see [0025]: upgrading virus program...).

Hypponen et al. and Liang et al. are analogous art because they are from the same problem solving area (network anti-virus applications). It would be obvious to one of ordinary skill in the art at the time of the invention to modify the method of detecting viruses of Hypponen et al. such that it would switch between a first and second modes and update the virus application with rules and policies to repair and prevent viral outbreaks. The motivation for doing so would have been to maximize the effectiveness and efficiency of the antivirus application detection by maintaining traffic flow of irrelevant packets, thereby increasing performance on suspected packets.

For claim 2, US PGPUB '957 teaches:

A monitor as recited in claim 1, further comprising:

a traffic controller coupled to the virus sensor and the network arranged to select certain

data packets wherein the selected data packets are forwarded to the virus sensor. (see [0007]

and [0025]: means for intercepting...)

For claim 3, US PGPUB '957 teaches:

A monitor as recited in claim 2, wherein the traffic controller further comprises:

a data packet copier operable to generate a copied data packet of each of the selected

data packets wherein the selected data packets are returned to the network (see [0019], [0022]-

[0024]: copied...) *but does not expressly disclose* such a step in a first mode.

Liang et al. however in US PGPub '687 however does disclose detecting the computer

viruses by switching between a number of modes (i.e. first and second modes) (see [0034]:

mode switching for virus software...).

For claim 4, US PGPUB '957 teaches:

A monitor as recited in claim 3 wherein the data packet copy unit is disabled in the second

mode such that the selected data packets are passed to the virus sensor (see [0024] and

[0036]: transferring means...) *but does not expressly disclose* such a step in a second mode.

Liang et al. however in US PGPub '687 however does disclose detecting the computer

viruses by switching between a number of modes (i.e. first and second modes) (see [0034]:

mode switching for virus software...).

For claims 3 and 4 Hypponen et al. and Liang et al. are analogous art because they are

from the same problem solving area (network anti-virus applications). It would be obvious to one

of ordinary skill in the art at the time of the invention to modify the method of detecting viruses of

Hypponen et al. such that it would switch between a first and second modes. The motivation for

doing so would have been to maximize the effectiveness and efficiency of the antivirus

application detection by maintaining traffic flow of irrelevant packets, thereby increasing

performance on suspected packets.

For claim 5, US PGPUB '957 teaches:

A monitor as recited in claim 4, wherein the virus monitor further comprises:

a data packet protocol identifier coupled to the virus sensor arranged to identify a data

packet protocol associated with the data packet infected by the computer virus. (see Figure 2

and associated text: predefined file types... suspect types...)

For claim 6, US PGPUB '957 teaches:

A monitor as recited in claim 5, wherein the selected data packets are each associated with the

data packet protocol associated with the computer virus such that only those data packets

associated with the identified data packet protocol are selected from the network. (see Figure 2

and associated text: predefined file types... suspect types...)

For claim 7, US PGPUB '957 teaches:

A monitor as recited in claim 1 wherein the virus sensor unit further comprises:

a filescan module arranged to scan a selected file for the computer virus. (see [0019]:

data... virus scanning)

For claim 8, US PGPUB '957 teaches:

A monitor as recited in claim 7, wherein the filescan unit is remotely located. (see [0031]:

wireless capability...; [0038]: scanning server 7...)

For claim 9, US PGPUB '957 teaches:

A monitor as recited in claim 8, wherein the remotely located filescan unit is used for scan large

selected files. (see [0043]: scanning server... large volume...)

For claim 11, and similar claim 18 US PGPUB '957 teaches:

A method as recited in claim 10, further comprising:

isolating a portion of the network infected by the computer virus; and

cleaning the isolated portion of the network. (see [0015] – [0018]: disinfect...)

For claim 12, and similar claim 19 US PGPUB '957 teaches:

A method as recited in claim 10, further comprising:

sending a virus report to a controller. (see [0016] – [0018]: virus alert message...)

For claim 13, and similar claim 20 US PGPUB '957 teaches:

A method as recited in claim 10, further comprising:

copying selected ones of the flow of data packets from corresponding original data

packets retrieved from the flow of data packets based upon a packet type; and returning the

retrieved data packets to the flow of data packets. (see [0015]: return...)

For claim 14, and similar claim 21 US PGPUB '957 teaches:

A method as recited in claim 13, wherein the packet type is determined by the detected

computer virus. (see [0008] and [0036]: type capable of containing virus...; Figure 2: data file

types)

For claim 15, and similar claim 22 US PGPUB '957 teaches:

A method as recited in claim 14, wherein a network bandwidth associated with the standby

mode is substantially unaffected by the monitoring (see [0015]) *but does not expressly disclose*

the standby mode.

Liang et al. however in US PGPub '687 however does disclose detecting the computer

viruses by switching between a number of modes (i.e. standby and inline modes) (see [0034]:

mode switching for virus software...).

For claim 16, and similar claim 23 US PGPUB '957 teaches:

A method as recited in claim 14, wherein a network bandwidth is reduced by the infected data packets that are not returned to the flow of data packets. (see [0016] – [0018]) *but does not expressly disclose* the inline mode.

Liang et al. however in US PGPub '687 however does disclose detecting the computer viruses by switching between a number of modes (i.e. standby and inline modes) (see [0034]: mode switching for virus software...).

For claims 15 and 16 Hypponen et al. and Liang et al. are analogous art because they are from the same problem solving area (network anti-virus applications). It would be obvious to one of ordinary skill in the art at the time of the invention to modify the method of detecting viruses of Hypponen et al. such that it would switch between a first and second modes. The motivation for doing so would have been to maximize the effectiveness and efficiency of the antivirus application detection by maintaining traffic flow of irrelevant packets, thereby increasing performance on suspected packets.

Interview Summary

11.   The Examiner has included the Interview Summary for the telephonic interview conducted 31 May 2007.

Conclusion

12.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laurel Lashley whose telephone number is 571-272-0693. The examiner can normally be reached on Monday - Thursday, alt Fridays btw 7:30 am & 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron, Jr. can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

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would like assistance from a USPTO Customer Service Representative or access to the

automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Laurel Lashley
Examiner
Art Unit 2132

30 September 2007